

VOICE CONTROL OF A MEDIA PLAYBACK SYSTEM

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of application Ser. No. 16/700,607, titled “Voice Control of a Media Playback System”, filed Dec. 2, 2019, which is a continuation of application Ser. No. 15/438,749, titled “Voice Control of a Media Playback System”, filed Feb. 21, 2017, which claims priority to: (i) App. No. 62/298,410, titled “Default Playback Device(s)”, filed Feb. 22, 2016; (ii) App. No. 62/298,418, titled “Audio Response Playback”, filed Feb. 22, 2016; (iii) App. No. 62/298,433, titled “Room-corrected Voice Detection”, filed Feb. 22, 2016; (iv) App. No. 62/298,439, titled “Content Mixing”, filed Feb. 22, 2016; (v) App. No. 62/298,425, titled “Music Service Section”, filed Feb. 22, 2016; (vi) App. No. 62/298,350, titled “Metadata exchange involving a networked playback system and a networked microphone system”, filed Feb. 22, 2016; (vii) App. No. 62/298,388, titled “Handling of loss of pairing between networked devices”, filed Feb. 22, 2016; (viii) App. No. 62/298,393, titled “Action based on User ID”, filed Feb. 22, 2016; and (ix) App. No. 62/132,350, titled “Voice Control of a Media Playback System”, filed Feb. 22, 2016. The entire contents of the 62/298,410; 62/298,418; 62/298,433; 62/298,439; 62/298,425; 62/298,350; 62/298,388; 62/298,393; 62/132,350; Ser. Nos. 15/438,749; and 16/700,607 applications are incorporated herein by reference for all purposes.

FIELD OF THE DISCLOSURE

[0002] The disclosure is related to consumer goods and, more particularly, to methods, systems, products, features, services, and other elements directed to media playback or some aspect thereof.

BACKGROUND

[0003] Options for accessing and listening to digital audio in an out-loud setting were limited until in 2003, when SONOS, Inc. filed for one of its first patent applications, entitled “Method for Synchronizing Audio Playback between Multiple Networked Devices,” and began offering a media playback system for sale in 2005. The Sonos Wireless HiFi System enables people to experience music from many sources via one or more networked playback devices. Through a software control application installed on a smartphone, tablet, or computer, one can play what he or she wants in any room that has a networked playback device. Additionally, using the controller, for example, different songs can be streamed to each room with a playback device, rooms can be grouped together for synchronous playback, or the same song can be heard in all rooms synchronously.

[0004] Given the ever growing interest in digital media, there continues to be a need to develop consumer-accessible technologies to further enhance the listening experience.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] Features, aspects, and advantages of the presently disclosed technology may be better understood with regard to the following description, appended claims, and accompanying drawings where:

[0006] FIG. 1 shows an example media playback system configuration in which certain embodiments may be practiced;

[0007] FIG. 2 shows a functional block diagram of an example playback device;

[0008] FIG. 3 shows a functional block diagram of an example control device;

[0009] FIG. 4 shows an example controller interface;

[0010] FIG. 5 shows an example plurality of network devices;

[0011] FIG. 6 shows a function block diagram of an example network microphone device;

[0012] FIG. 7 shows an example flow diagram for designating default playback device(s);

[0013] FIG. 8A-D show example user interfaces for assigning network microphone devices;

[0014] FIG. 9 shows an example flow diagram for applying default playback device designation(s);

[0015] FIG. 10 shows a flow diagram of an example method of playing an audio response according to aspects described herein;

[0016] FIG. 11 shows a flow diagram of blocks 1008 and 1012 of FIG. 11 in more detail according to aspects described herein;

[0017] FIG. 12 is an example flow diagram related to providing acoustics of an environment to a network microphone device;

[0018] FIG. 13 is another example flow diagram related to providing acoustics of an environment to a network microphone device;

[0019] FIG. 14 is an example flow diagram related to interpreting voice input received by the network microphone device;

[0020] FIG. 15 is an example flow diagram related to determining acoustics of an environment;

[0021] FIG. 16 is another example flow diagram related to applying directionality to audio content played by a playback device;

[0022] FIG. 17 is an example flow diagram related to a playback device adjusting of volume of audio content in the presence of content output;

[0023] FIG. 18 is another example flow diagram related to playback of content output and/or audio content by a playback device;

[0024] FIG. 19 is an example flow diagram related to identifying a streaming music service via a network microphone device;

[0025] FIG. 20 is another example flow diagram related to identifying a streaming music service via a network microphone device;

[0026] FIG. 21 shows aspects of an example method for metadata exchange involving a networked playback system and a networked microphone system according to some embodiments;

[0027] FIG. 22 shows aspects of an example method for handling of loss of pairing between networked devices according to some embodiments;

[0028] FIG. 23 shows aspects of an example method for handling of loss of pairing between networked devices according to some embodiments;

[0029] FIG. 24 shows of an example method for taking actions based on a user identification according to some embodiments;